Aircraft interiors INTERNATIONAL

In this issue

SEAT INNOVATION

The benefits, risks and rewards of creating a bespoke premium class seat

FUTURE GALLEYS

The next generation of galleys is set to have more function, more fun and more beauty

PASSENGER BEHAVIOR

As badly behaved passengers hit the headlines, we look at what can and should be done to maintain order in the air



CABIN COULD BE ALL IN THE MIND

SUPPLIER PERSPECTIVE: AIM ALTITUDE

We asked Richard Bower, group commercial director at AIM Altitude, for his view on aspects of future galleys.

With regard to look and feel, he comments: "Increasingly, galleys will become used as a platform for airlines to differentiate themselves at the point of boarding. This will lead to

greater integration of the galley and bar complexes at Door 2. Gallevs in customer-facing areas are likely to pieces. While the fore and aft galleys will potentially retain the 'working galley' feel, aft galley complexes have begun to be integrated with lavatories to save space, and this trend is expected to continue."

In terms of positioning within the that galley systems could be developed with variable positions to accommodate changes in cabin configuration, giving

of the overall atmosphere and make up of the cabin. Areas designed to adapt to different periods within the flight, to create great welcome spaces - not kitchen entrances - and to enhance the flying experience for passengers as well as crew. Something they rarely do currently."

This idea of galleys being flexible spaces could be key. Galleys - particularly on long-haul flights - are used intensively during meal service, but in quieter periods they do little other than offer a walk-up drink and snack bar. When the main meal service is complete, Bailey would love to see the galley units moved aside in a similar way to moveable library storage/shelving units, and the space opened up to give passengers a destination. Even better, this new space could be monetized.

"In our radical concept, the internal galley inserts traverse inwards to use the space in the galley, allowing fold-out beds to be deployed at the rear that could be sold to economy passengers to catch five or six hours of sleep, depending on the flight route," says Bailey. "Ultimately galleys could work harder to enhance the customer experience on board, creating more experiential spaces for customers or opening up new revenue opportunities for airlines."



BELOW DECKS

We've had the open kitchen concept, but taking the idea of a more traditional restaurant could provide inspiration - and indeed remove the problem of entering through the kitchen altogether.

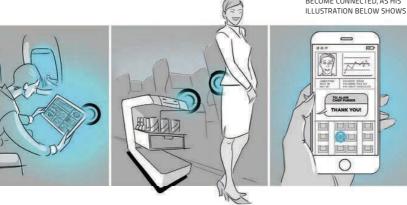
Tim Manson, design director at JPA Design in London, suggests, "It may be that flying in the future would be improved if the galleys were not on the main flight deck at all. Put them in the hold perhaps, but not in the passenger cabins. No building, house, office or hotel would accept a kitchen as main entrance or reception area, and there would much to gain if the galley location and design could be improved."

THE FUTURE

In terms of technology, our experts have some bold ideas. Manson has embraced the notion of the connected aircraft and applied it to the galley space. "A better marriage of styling and functional requirements would improve passenger experiences, but we believe that future galleys must get connected if they are to create smarter service and operational solutions. We can imagine that galleys, carts, crew, passengers and ground services alike will all be digitally linked, all talking to one another, collating data, streaming information, providing airlines with rich information to analyze and discover new creative ways to be efficient and add value.

"It is not inconceivable that galleys will become fully autonomous"

IPA DESIGN'S TIM MANSON (ABOVE) BELIEVES THAT FUTURE GALLEYS MUST BECOME CONNECTED, AS HIS



"Taking it a step further, it's not inconceivable that galleys will become fully autonomous, pre-empting operational needs, pre-ordering a passenger's favorite foods, optimizing electrical loads and managing their own repairs, even automatically ordering parts for their own servicing."

Jean-Pierre Alfano of Airjet Designs in Toulouse has also considered the future of galleys, and he has an idea that would delight many short-haul low-cost carriers: replacing galleys with vending machines. The machines would use NFC technology for payment and would be located over the wing area in narrow-body aircraft for reasons related to minimizing passenger traffic and weight balance.

How would this work in practice? "Passengers would stay in their seats and order from their seat through the cabin wi-fi network and dedicated airline app. The

"Investments in comfort could be negated by banging and clanging in the galley"

vending machine could also possibly be coupled with an automated trolley robot or a flying drone that would take and deliver the food and beverages," explains Alfano.

KEEP IT DOWN

All this technology sounds exciting, but in the near-term, something rather simpler could enhance the galley experience – and indeed that of the entire aircraft. For Daniel Baron, the future of galleys is hush-hush. He means this quite literally, due to modern aircraft such as the Boeing 787 and Airbus A350 providing a quieter cabin experience – apart from in the galley areas, where the sounds of crew working and talking is now more pronounced.

"We already we have a situation on next-generation aircraft in which customers seated near galleys can hear everything going on inside them. Imagine paying for an executive suite at a five-star hotel, with only a curtain between your bed and the hotel's kitchen. If an airline's premium customer has paid US\$8,000 for the promise of sleep on a full-flat bed (a seat which costs the airline

BELOW: AIM ALTITUDE VIEWS GALLEYS AS A PLATFORM FOR AIRLINES TO DIFFERENTIATE THEMSELVES AT BOARDING



US\$50-70,000 per pax), the notion that sleep might be interrupted by galley noise is ludicrous."

His solutions are simple: quiet latches that do not smack metal against metal when closing, better ways to dampen noise when carts and containers are handled, and more use of noise-absorbing materials.

"Some solutions are already on the market, but they are not used because manufacturers are unwilling or unable to go outside their usual supply chain for new products," Baron states. "In general, galleys have been built the same way for a very long time, and are rarely on the radar of an airline's top management. But

they should be – otherwise, investments in comfort will forever be negated by banging and clanging. Sleep needs to be offered in the larger context of total well-being on board, and the sound of silence is priceless."

Our experts have some amazing ideas, but for Sutter, perhaps the solution to galleys lies at a more fundamental level of change. "Perhaps the major impulse for galley design revolution would be to reinvent the air dining experience, turning it into a more suitable format aligned with the constraints of air travel and without trying to shoehorn it into a concept of service that was never meant to be airborne in the first place."

THE THREE PS

For Paul Wylde, CEO and creative director at the Paulwylde design consultancy in the USA, modern galley design should better reflect the way people want to eat in flight.

"Understanding how to design a galley system means understanding how people want to eat, what they want to eat, and how the operation can best deliver within very challenging circumstances – budget, space restriction, limited resources and ever higher customer expectations. So far galley systems have evolved and developed from an operational perspective, rather than a customer expectation."

From experience as a design consultant to airlines and hotel operators including Hilton

and IHG, Wylde has noted key trends in the food and beverage industry, such as healthier options, smaller portions, fresh and local produce, seasonal foods, exotic creations, and a dash of celebrity and glamour.

A key insight the team has learned is the notion of 'managed flexibility' – the need for airlines to standardize to manage, yet customize to serve. Wylde says that airlines need to create viable systems to deliver costeffective catering to huge numbers of people with limited resources, yet deliver on the promise of fresh, seasonal, local and branded food and beverage experiences.

Delivering on this challenge involves three strategic objectives that, Wylde, says, should

be seamlessly integrated and coordinated – people, product and presentation.

People means the cabin crew, their knowledge, their engagement and their ability to customize. Product relates to quality of product, which should be fresh, seasonal, have variation and of course be delicious. Presentation involves macro and micro elements, from galley to tray, bringing in packaging and product design.

"Due to the evolution of most airline operations over the past 30 years, very rarely are these three resources aligned in the creation of galley environments, as they have been in hospitality food and beverage experiences," says Wylde.